INTERNATIONAL SEARCH REPORT

Intern Application No PCT/IB2004/050902

PCT/IB2004/050902 A CLASSIFICATION OF SUBJECT MATTER IPC 7 H03F1/30 H03F H03F3/21 H03F3/343 H03F1/02 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) H03F Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ. C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 6 043 714 A (MIYAZAKI YUKIO ET AL) 28 March 2000 (2000-03-28) 1 column 10, line 48 - column 11, line 38; 2 figure 4 Y US 2003/102924 A1 (MATSUMOTO HIDETOSHI ET 2 AL) 5 June 2003 (2003-06-05) page 3, paragraph 25-27; figure 6 US 2004/000954 A1 (KIM JI HOON ET AL) P,A 1 January 2004 (2004-01-01) 1-5 page 2, paragraph 21-32; figures 2a,4a & KR 2002 064 870 A (INFORMATION AND COMM UNIVERSIT) 10 August 2002 (2002-08-10) 1-5 the whole document Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents : "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention "O" document referring to an oral disclosure, use, exhibition or cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled other means "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 30 July 2004 06/08/2004 Name and mailing address of the iSA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Fedi, G

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Patent document Publication			т	PC1/1B2004/050902		
cited in search report		Publication date	Patent family member(s)		Publication date	
US 6043714	A	28-03-2000	JP DE	11163640 A 19821735 A		
US 200310292	4 A1	05-06-2003	JP AU CN WO TW	2001284984 A 4465901 A 1422455 T 0176060 A1 503613 B	15-10-2001 04-06-2003	
US 2004000954		01-01-2004	KR JP	2002064870 A 2004040769 A	10-08-2002 05-02-2004	
KR 2002064870) A	10-08-2002	JP US	2004040769 A 2004000954 A1	05-02-2004 01-01-2004	